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September 13, 1991

TO: Minerals File

FROM: Holland Shepherd, Senior Reclamation Specialist *HWS*

RE: Field Inspection, 4th Line Expansion, Bingham Canyon Mine, Kennecott Utah Copper (KUC), M/035/002, Salt Lake County, Utah

Date of Inspection: September 6, 1991

Time of Inspection: 9:00 a.m. - 12:00 a.m.

Conditions: Warm, overcast

Participants: Fred Fox, Don Deines, Russ Hubbard, Kennecott Utah Copper;
Holland Shepherd, Tony Gallegos, DOGM

This inspection was performed as a means of field proofing the design plans for Kennecott's 4th Line Expansion. The expansion was approved last Spring of 1990, and construction has been ongoing since the summer of 1990. The plan for the 4th Line Expansion was amended in April of 1991, and is pending approval by this Division. The visit was also called to acquaint Division staff with new Kennecott staff.

We met with Mr. Fred Fox and Mr. Don Deines of KUC's Environmental Program. Mr. Fox and Mr. Deines are new to the program. Mr. Deines just started with KUC two weeks ago. Mr. Fox has been with KUC for almost three months.

From the Division's observation, KUC's Environmental Program has experienced a substantial turnover of staff (including the Program Director), since this time last year. This has contributed to the discontinuity in finalizing the recent 4th Line Expansion amendment; and in progressing with discussions related to outstanding permit issues of the larger Bingham Canyon Plan.

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I spoke to Mr. Fox about the designation of a new individual to act as liaison for Kennecott on reclamation/permitting issues and research. He indicated that he would speak to Cindy Emmons concerning the matter and get back to me. Mr. Bart Kale who had been KUC's liaison, has recently left KUC. I stressed that the Division would be placing more emphasis on the Annual Reclamation Plan implementation and follow-up this year, especially in the area of documentation. Documentation of reclamation research and trends has been seriously lacking over the years since the original 1978 agreement.

Messrs. Fox and Deines presented us with a well formatted and detailed response to the Division's August 6, 1991 review letter. Also, updated pages and a map have been provided for insertion into the existing plan. The Division anticipates little problem in completing and approving the 4th Line Expansion amendment.

For the field inspection portion of this visit, we met with Mr. Russ Hubbard, 4th Line Construction Manager. Mr. Hubbard took us on a tour of several locations associated with the 4th Line Expansion project.

We stopped briefly at the soil test plot site. The site was developed to evaluate plant success on subsoil vs topsoil plots. No topsoil was salvaged from the area originally impacted by KUC's Modernization Project (1986). Plots were established to provide a means for determining an effective seed mixture, and soil amendments to be used on the subsoil during reclamation. The original test plots were inadvertently covered up by Kennecott. The new test plots were established the fall of 1990. They are to be monitored spring, summer and fall. Apparently no monitoring has taken place as of this date. If the test plots prove unsuccessful, Kennecott may be asked to bring in borrow material for those areas where topsoil was not originally salvaged.

We visited several other areas on site, which included: General Fill Stockpiles 1 and 2; Topsoil Stockpiles 1 and 2; 400 feet diameter thickeners; clay borrow area; water treatment plant; Zone III and IV Retention Ponds; and the process water ponds.

Topsoil Stockpile #1 already has a lot of volunteer growth. The operator plans to drill seed this site this fall. We asked that the operator also place signs on the stockpiles to prevent removal of material.

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The Batch Plant is planned to be decommissioned at the end of September 91. The temporary Lay Down area and Construction Crew parking areas are expected to be reclaimed in the spring of 1992.

The Thickener construction is 70% complete. When complete, the thickeners will provide 47-50% solid discharged at 50,000 gpm vs the current 32% solid discharge at 50,000 gpm.

According to Mr. Hubbard, process water is returned and stored from the Magna Tailings to the storage ponds at the Modernization Project site. The Ph ranges from 7-8. No problems have been encountered with waterfowl.

Information obtained from other sources indicates that the pond has been a problem with various types of wildlife. This portion of the site and the thickeners should be watched for impacts to wildlife, in particular waterfowl.

jb
cc: Cindy Emmons, KUC
Wayne Hedberg, DOGM
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